

CRF Errors Corrected by the STIC Systems Branch

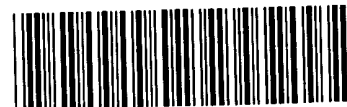
CRF Processing Date: 4/3/02
 Edited by: DX
 Verified by: DX (STIC staff)

Serial Number: 09/9411794

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/941,179A

DATE: 04/03/2002

TIME: 11:43:41

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

W--> 3 <110> APPLICANT: Bayer Aktiengesellschaft
5 <120> TITLE OF INVENTION: Acetylcholine receptor subunits
7 <130> FILE REFERENCE: Le A 34 821
8 <140> CURRENT APPLICATION NUMBER: US/09/941,179A
9 <141> CURRENT FILING DATE: 2001-08-27
11 <150> PRIOR APPLICATION NUMBER: DE 100 42 177.6
12 <151> PRIOR FILING DATE: 2000-08-28
14 <160> NUMBER OF SEQ ID NOS: 17
16 <170> SOFTWARE: PatentIn Ver. 2.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 45
20 <212> TYPE: PRT
21 <213> ORGANISM: Torpedo californica
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25 1 5 10 15
27 Lys Ile Met Trp Thr Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile
28 20 25 30
30 Ile Val Thr His Phe Pro Phe Asp Gln Gln Asn Cys Thr
31 35 40 45
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 1869
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <221> NAME/KEY: CDS
42 <222> LOCATION: (1)..(1866)
43 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified alpha
44 4 subunit of the chicken nicotinic acetylcholine
45 receptor
47 <400> SEQUENCE: 2
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49 Met Gly Phe Leu Val Ser Lys Gly Asn Leu Leu Leu Leu Cys Ala
50 1 5 10 15
52 agc atc ttc ccc gct ttc ggc cac gtg gaa acg cga gcc cat gcg gag 96
53 Ser Ile Phe Pro Ala Phe Gly His Val Glu Thr Arg Ala His Ala Glu
54 20 25 30
56 gag cgc ctc ctg aag aaa ctc ttc tcc ggg tat aac aag tgg tcc cgt 144
57 Glu Arg Leu Leu Lys Lys Leu Phe Ser Gly Tyr Asn Lys Trp Ser Arg
58 35 40 45
60 ccc gtc gcc aac att tcg gat gtg gtc ctg gtc cgc ttc ggc ttg tcc 192
61 Pro Val Ala Asn Ile Ser Asp Val Val Leu Val Arg Phe Gly Leu Ser
62 50 55 60

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Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

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65 Ile Ala Gln Leu Ile Asp Val Asp Glu Lys Asn Gln Met Met Thr Thr
66 65 70 75 80
68 aat gtg tgg gtg aag cag gag tgg cac gac tac aag ctg cgc tgg gac 288
69 Asn Val Trp Val Lys Gln Glu Trp His Asp Tyr Lys Leu Arg Trp Asp
70 85 90 95
72 ccc cag gag tat gaa aac gtc aca tcc atc cga atc ccc tca gag ctc 336
73 Pro Gln Glu Tyr Glu Asn Val Thr Ser Ile Arg Ile Pro Ser Glu Leu
74 100 105 110
76 atc tgg cgg ccg gac ata gtc ctc tac aac aat gcc gac ggc aac ttc 384
77 Ile Trp Arg Pro Asp Ile Val Leu Tyr Asn Asn Ala Asp Gly Asn Phe
78 115 120 125
80 gag gta acg ctg gcg acg aag gcg act ttg aat tat acg gga cgt gtg 432
81 Glu Val Thr Leu Ala Thr Lys Ala Thr Leu Asn Tyr Thr Gly Arg Val
82 130 135 140
84 gag tgg cgc ccg ccg gct atc tac aag tcc tcg tgc gag atc gac gtg 480
85 Glu Trp Arg Pro Pro Ala Ile Tyr Lys Ser Ser Cys Glu Ile Asp Val
86 145 150 155 160
88 gaa tac ttc ccg ttc gac cag cag acg tgc gtc atg aag ttc ggc tcg 528
89 Glu Tyr Phe Pro Phe Asp Gln Gln Thr Cys Val Met Lys Phe Gly Ser
90 165 170 175
92 tgg aca tat gac aaa gct aag ata gac ttg gtg agc atg cat agc cat 576
93 Trp Thr Tyr Asp Lys Ala Lys Ile Asp Leu Val Ser Met His Ser His
94 180 185 190
96 gtg gac caa ctg gac tac tgg gaa agc ggg gag tgg gtc atc att aat 624
97 Val Asp Gln Leu Asp Tyr Trp Glu Ser Gly Glu Trp Val Ile Ile Asn
98 195 200 205
100 gcc gtg ggc aat tac aac agc aag aaa tat gaa tgc tgc aca gag atc 672
101 Ala Val Gly Asn Tyr Asn Ser Lys Lys Tyr Glu Cys Cys Thr Glu Ile
102 210 215 220
104 tac cct gat ata act tac tcc ttc att atc cgg agg ctg ccg ctg ttc 720
105 Tyr Pro Asp Ile Thr Tyr Ser Phe Ile Ile Arg Arg Leu Pro Leu Phe
106 225 230 235 240
108 tac aca atc aat ttg atc att ccc tgc ctg ctt atc tcc tgc ttg act 768
109 Tyr Thr Ile Asn Leu Ile Ile Pro Cys Leu Leu Ile Ser Cys Leu Thr
110 245 250 255
112 gtc ctg gtc ttc tac cta ccc tct gag tgc gga gag aag ata acc ttg 816
113 Val Leu Val Phe Tyr Leu Pro Ser Glu Cys Gly Glu Lys Ile Thr Leu
114 260 265 270
116 tgc atc tct gtg ctg cta tcc ctc acg gtg ttc ctg ctg ctc atc aca 864
117 Cys Ile Ser Val Leu Leu Ser Leu Thr Val Phe Leu Leu Ile Thr
118 275 280 285
120 gag atc atc cct tct acc tcc ctg gtc atc ccc ctg ata gga gag tat 912
121 Glu Ile Ile Pro Ser Thr Ser Leu Val Ile Pro Leu Ile Gly Glu Tyr
122 290 295 300
124 ctg ctc ttc acc atg ata ttt gtc acc ttg tct atc atc atc act gtc 960
125 Leu Leu Phe Thr Met Ile Phe Val Thr Leu Ser Ile Ile Ile Thr Val
126 305 310 315 320
128 ttt gtg ctc aac gta cac cac cgt tca cca cgt acc cac acg atg cct 1008
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Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

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129 Phe Val Leu Asn Val His His Arg Ser Pro Arg Thr His Thr Met Pro
130          325          330          335
132 gac tgg gtg agg agg gtc ttc ctt gac ata gtc cca cgt ctc ctc ttc 1056
133 Asp Trp Val Arg Arg Val Phe Leu Asp Ile Val Pro Arg Leu Leu Phe
134          340          345          350
136 atg aag cgg ccc tcc aca gtg aaa gac aat tgc aag aag ctt att gaa 1104
137 Met Lys Arg Pro Ser Thr Val Lys Asp Asn Cys Lys Lys Leu Ile Glu
138          355          360          365
140 tct atg cac aaa cta acc aac tca cca agg ctt tgg tct gag acc gac 1152
141 Ser Met His Lys Leu Thr Asn Ser Pro Arg Leu Trp Ser Glu Thr Asp
142          370          375          380
144 atg gag ccc aac ttc act acc tca tcc tcc ccc agc ccc cag agt aat 1200
145 Met Glu Pro Asn Phe Thr Thr Ser Ser Ser Pro Ser Pro Gln Ser Asn
146 385          390          395          400
148 gaa cct tca ccc aca tct tcc ttc tgt gcc cac ctt gag gag cca gcc 1248
149 Glu Pro Ser Pro Thr Ser Ser Phe Cys Ala His Leu Glu Glu Pro Ala
150          405          410          415
152 aaa cct atg tgc aaa tcc cct tct gga cag tac tca atg ctg cac cct 1296
153 Lys Pro Met Cys Lys Ser Pro Ser Gly Gln Tyr Ser Met Leu His Pro
154          420          425          430
156 gag ccc cca cag gtg acg tgt tcc tct ccg aag ccc tcc tgc cac ccc 1344
157 Glu Pro Pro Gln Val Thr Cys Ser Ser Pro Lys Pro Ser Cys His Pro
158          435          440          445
160 ctg agt gac acc cag acc aca tct atc tca aaa ggc aga tgc ctc agt 1392
161 Leu Ser Asp Thr Gln Thr Thr Ser Ile Ser Lys Gly Arg Ser Leu Ser
162          450          455          460
164 gtt cag cag atg tac agc ccc aat aag aca gag gaa ggg agc atc cgc 1440
165 Val Gln Gln Met Tyr Ser Pro Asn Lys Thr Glu Glu Gly Ser Ile Arg
166 465          470          475          480
168 tgt agg tcc cga agc atc cag tac tgt tac ctg cag gag gac tct tcc 1488
169 Cys Arg Ser Arg Ser Ile Gln Tyr Cys Tyr Leu Gln Glu Asp Ser Ser
170          485          490          495
172 cag acc aat ggc cac tct agt gcc tct cca gcg tcg cag cgc tgc cac 1536
173 Gln Thr Asn Gly His Ser Ser Ala Ser Pro Ala Ser Gln Arg Cys His
174          500          505          510
176 ctc aat gaa gag cag ccc cag cac aag ccc cac cag tgc aag tgt aag 1584
177 Leu Asn Glu Glu Gln Pro Gln His Lys Pro His Gln Cys Lys Cys Lys
178          515          520          525
180 tgc aga aag gga gag gca gct ggc aca ccg act caa gga agc aag agc 1632
181 Cys Arg Lys Gly Glu Ala Ala Gly Thr Pro Thr Gln Gly Ser Lys Ser
182          530          535          540
184 cac agc aac aaa gga gaa cac ctc gtg ctg atg tcc cca gcc ctg aag 1680
185 His Ser Asn Lys Gly Glu His Leu Val Leu Met Ser Pro Ala Leu Lys
186 545          550          555          560
188 ctg gcg gtg gaa ggg gtc cac tac att gca gac cac ctg cga gca gaa 1728
189 Leu Ala Val Glu Gly Val His Tyr Ile Ala Asp His Leu Arg Ala Glu
190          565          570          575
192 gat gca gat ttc tca gtg aag gaa gac tgg aag tac gta gca atg gtc 1776
193 Asp Ala Asp Phe Ser Val Lys Glu Asp Trp Lys Tyr Val Ala Met Val

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TIME: 11:43:41

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

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194          580          585          590
196 att gac cgg atc ttt ctc tgg atg ttc atc atc gtg tgt ttg ctg ggg 1824
197 Ile Asp Arg Ile Phe Leu Trp Met Phe Ile Ile Val Cys Leu Leu Gly
198          595          600          605
200 acc gtt ggg ctc ttc ctc ccg ccg tgg ctg gca gga atg atc taa 1869
201 Thr Val Gly Leu Phe Leu Pro Pro Trp Leu Ala Gly Met Ile
202          610          615          620
205 <210> SEQ ID NO: 3
206 <211> LENGTH: 622
207 <212> TYPE: PRT
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified alpha
212     4 subunit of the chicken nicotinic acetylcholine
213     receptor
215 <400> SEQUENCE: 3
216 Met Gly Phe Leu Val Ser Lys Gly Asn Leu Leu Leu Leu Cys Ala
217   1          5          10          15
219 Ser Ile Phe Pro Ala Phe Gly His Val Glu Thr Arg Ala His Ala Glu
220          20          25          30
222 Glu Arg Leu Leu Lys Lys Leu Phe Ser Gly Tyr Asn Lys Trp Ser Arg
223          35          40          45
225 Pro Val Ala Asn Ile Ser Asp Val Val Leu Val Arg Phe Gly Leu Ser
226          50          55          60
228 Ile Ala Gln Leu Ile Asp Val Asp Glu Lys Asn Gln Met Met Thr Thr
229 65          70          75          80
231 Asn Val Trp Val Lys Gln Glu Trp His Asp Tyr Lys Leu Arg Trp Asp
232          85          90          95
234 Pro Gln Glu Tyr Glu Asn Val Thr Ser Ile Arg Ile Pro Ser Glu Leu
235          100          105          110
237 Ile Trp Arg Pro Asp Ile Val Leu Tyr Asn Asn Ala Asp Gly Asn Phe
238          115          120          125
240 Glu Val Thr Leu Ala Thr Lys Ala Thr Leu Asn Tyr Thr Gly Arg Val
241          130          135          140
243 Glu Trp Arg Pro Pro Ala Ile Tyr Lys Ser Ser Cys Glu Ile Asp Val
244 145          150          155          160
246 Glu Tyr Phe Pro Phe Asp Gln Gln Thr Cys Val Met Lys Phe Gly Ser
247          165          170          175
249 Trp Thr Tyr Asp Lys Ala Lys Ile Asp Leu Val Ser Met His Ser His
250          180          185          190
252 Val Asp Gln Leu Asp Tyr Trp Glu Ser Gly Glu Trp Val Ile Ile Asn
253          195          200          205
255 Ala Val Gly Asn Tyr Asn Ser Lys Lys Tyr Glu Cys Cys Thr Glu Ile
256          210          215          220
258 Tyr Pro Asp Ile Thr Tyr Ser Phe Ile Ile Arg Arg Leu Pro Leu Phe
259 225          230          235          240
261 Tyr Thr Ile Asn Leu Ile Ile Pro Cys Leu Leu Ile Ser Cys Leu Thr
262          245          250          255
264 Val Leu Val Phe Tyr Leu Pro Ser Glu Cys Gly Glu Lys Ile Thr Leu

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Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

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265          260          265          270
267 Cys Ile Ser Val Leu Leu Ser Leu Thr Val Phe Leu Leu Ile Thr
268          275          280          285
270 Glu Ile Ile Pro Ser Thr Ser Leu Val Ile Pro Leu Ile Gly Glu Tyr
271          290          295          300
273 Leu Leu Phe Thr Met Ile Phe Val Thr Leu Ser Ile Ile Ile Thr Val
274 305          310          315          320
276 Phe Val Leu Asn Val His His Arg Ser Pro Arg Thr His Thr Met Pro
277          325          330          335
279 Asp Trp Val Arg Arg Val Phe Leu Asp Ile Val Pro Arg Leu Leu Phe
280          340          345          350
282 Met Lys Arg Pro Ser Thr Val Lys Asp Asn Cys Lys Lys Leu Ile Glu
283          355          360          365
285 Ser Met His Lys Leu Thr Asn Ser Pro Arg Leu Trp Ser Glu Thr Asp
286          370          375          380
288 Met Glu Pro Asn Phe Thr Thr Ser Ser Ser Pro Ser Pro Gln Ser Asn
289 385          390          395          400
291 Glu Pro Ser Pro Thr Ser Ser Phe Cys Ala His Leu Glu Glu Pro Ala
292          405          410          415
294 Lys Pro Met Cys Lys Ser Pro Ser Gly Gln Tyr Ser Met Leu His Pro
295          420          425          430
297 Glu Pro Pro Gln Val Thr Cys Ser Ser Pro Lys Pro Ser Cys His Pro
298          435          440          445
300 Leu Ser Asp Thr Gln Thr Thr Ser Ile Ser Lys Gly Arg Ser Leu Ser
301          450          455          460
303 Val Gln Gln Met Tyr Ser Pro Asn Lys Thr Glu Glu Gly Ser Ile Arg
304 465          470          475          480
306 Cys Arg Ser Arg Ser Ile Gln Tyr Cys Tyr Leu Gln Glu Asp Ser Ser
307          485          490          495
309 Gln Thr Asn Gly His Ser Ser Ala Ser Pro Ala Ser Gln Arg Cys His
310          500          505          510
312 Leu Asn Glu Glu Gln Pro Gln His Lys Pro His Gln Cys Lys Cys Lys
313          515          520          525
315 Cys Arg Lys Gly Glu Ala Ala Gly Thr Pro Thr Gln Gly Ser Lys Ser
316          530          535          540
318 His Ser Asn Lys Gly Glu His Leu Val Leu Met Ser Pro Ala Leu Lys
319 545          550          555          560
321 Leu Ala Val Glu Gly Val His Tyr Ile Ala Asp His Leu Arg Ala Glu
322          565          570          575
324 Asp Ala Asp Phe Ser Val Lys Glu Asp Trp Lys Tyr Val Ala Met Val
325          580          585          590
327 Ile Asp Arg Ile Phe Leu Trp Met Phe Ile Ile Val Cys Leu Leu Gly
328          595          600          605
330 Thr Val Gly Leu Phe Leu Pro Pro Trp Leu Ala Gly Met Ile
331          610          615          620
335 <210> SEQ ID NO: 4
336 <211> LENGTH: 31
337 <212> TYPE: DNA
338 <213> ORGANISM: Artificial Sequence
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/941,179A

DATE: 04/03/2002

TIME: 11:43:42

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\04032002\I941179A.raw

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